IN THE CLAIMS

Please amend the claims to read as indicated herein.

1. (Currently amended) A system for at least one of identifying or localizing a serial data stream in a deserialized output, ~~whereby~~wherein the serial data stream is applied to an input port of a multiplexing device and the deserialized output is provided at a plurality of n output ports of the multiplexing device, the system comprising:

> pattern recognition units coupled to each one of the plurality of n output ports and being adapted for recognizing a deserialized identifier pattern corresponding to an identifier pattern within the serial data stream and for detecting a phase of the deserialized identifier pattern in the deserialized output~~,~~; and

> phase shifting units coupled to each one of the plurality of n output ports and being adapted for shifting the phase of the output of each respective port in correspondence with the detected phase of the deserialized identifier pattern.

2. (Currently amended) The system of claim 1, further comprising a deserializing unit for deserializing the identifier pattern within the serial data stream to produce the deserialized identifier pattern.

3. (Currently amended) A testing unit for testing a multiplexing device adapted for receiving a serial data stream at an input port and for providing a deserialized output at a plurality of n output ports, ~~whereby~~wherein a known serial data sequence is applied to the input port, the testing unit comprising:

> a detecting system for detecting the known serial data sequence in the

deserialized output, ~~whereby~~wherein the serial data stream is applied to an
input port of a multiplexing device and the deserialized output is provided at
a plurality of n output ports of the multiplexing device, the detecting system
comprising:

> pattern recognition units coupled to each one of the plurality of n output
>> ports and being adapted for recognizing a deserialized identifier
>> pattern corresponding to an identifier pattern within the serial data
>> stream and for detecting a phase of the deserialized identifier
>> pattern in the deserialized output~~;~~; and

> phase shifting units coupled to each one of the plurality of n output
>> ports and being adapted for shifting the phase of the output of
>> each respective port in correspondence with the detected phase
>> of the deserialized identifier pattern;

a comparator unit for comparing the deserialized output corresponding
> to the known serial data sequence with an expected output signal~~;~~; and

an analyzing unit for analyzing deviations of the deserialized output
> corresponding to the known serial data sequence with the expected output
> signal.

4. (Currently amended) A method for at least one of identifying or localizing a
serial data stream in a deserialized output provided at a plurality of n output ports, the
method comprising:

providing a pattern recognition at each one of the plurality of n output ports for
> recognizing a deserialized identifier pattern corresponding to an identifier
> pattern within the serial data stream and for detecting a phase of the

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deserialized identifier pattern in the deserialized output; and

shifting the phase of the output of each respective port in correspondence
with the detected phase of the deserialized identifier pattern.

5. (Currently amended) The method of claim 4, further comprising first
deserializing the identifier pattern within the serial data stream to produce the
deserialized identifier pattern.

6. (Currently amended) A method for testing a multiplexing device adapted for
receiving a serial data stream at an input port and for providing a deserialized output at
a plurality of n output ports, the method comprising:

applying a known serial data sequence to the input port;

detecting the known serial data sequence in the deserialized output by:

providing a pattern recognition at each one of the plurality of n output ports
for recognizing a deserialized identifier pattern corresponding to an
identifier pattern within the serial data stream and for detecting a phase
of the deserialized identifier pattern in the deserialized output, and

shifting the phase of the output of each respective port in correspondence
with the detected phase of the deserialized identifier pattern;

comparing the deserialized output corresponding to the known serial data
sequence with an expected output signal; and

analyzing deviations of the deserialized output corresponding to the known serial
data sequence with the expected output signal.

7. (Previously presented) A software program stored on a data carrier, for executing the method of claim 4 when run on a data processing system.

8. (Currently amended) A system for synchronizing a deserialized output with a serial data stream, ~~whereby~~wherein the serial data stream is applied to an input port of a multiplexing device and the deserialized output is provided at a plurality of n output ports of the multiplexing device, the system comprising:

   pattern recognition units coupled to each one of the plurality of n output ports and being adapted for recognizing a deserialized identifier pattern corresponding to an identifier pattern within the serial data stream and for detecting a phase of the deserialized identifier pattern in the deserialized output~~,~~; and

   phase shifting units coupled to each one of the plurality of n output ports and being adapted for shifting the phase of the output of each respective port in correspondence with the detected phase of the deserialized identifier pattern.

9. (Currently amended) The system of claim 8, further comprising a deserializing unit for deserializing the identifier pattern within the serial data stream to produce the deserialized identifier pattern.

10. (Currently amended) A method for synchronizing ~~the~~a deserialized output with ~~the~~a serial data stream, the method comprising:

   providing a pattern recognition at each one of the plurality of n output ports for recognizing a deserialized identifier pattern corresponding to an identifier pattern within the serial data stream and for detecting a phase of the deserialized identifier pattern in the deserialized output~~,~~; and

shifting the phase of the output of each respective port in correspondence with the detected phase of the deserialized identifier pattern.

11. (Currently amended) The method of claim 10, further comprising first deserializing the identifier pattern within the serial data stream to produce the deserialized identifier pattern.

12. (Previously presented) A software program stored on a data carrier, for executing the method of claim 6 when run on a data processing system.